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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DATA DIVISION METHOD AND DEVICE USING EXCLUSIVE OR CALCULATION

(57) Abstract: A plurality of original partial data are generated by dividing the original data by the prescribed processing unit bit length, a plurality of random number partial data each having a length less than or equal to the prescribed processing unit bit length are generated in correspondence to the plurality of original partial data, and a plurality of divided partial data that constitute each divided data are generated by using exclusive OR calculation of the original partial data and the random number partial data, each divided partial data having a length equal to the prescribed processing unit bit length. Then, the divided data in the desired number of division are generated from the plurality of divided partial data, such that the original data cannot be ascertained from any one divided data alone but the original data can be recovered from a prescribed number of the divided data among generated divided data.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JNTTCS-3-PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/JP 03/16389	International filing date (day/month/year) 19/12/2003	(Earliest) Priority Date (day/month/year) 19/12/2002
Applicant NTT COMMUNICATIONS CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

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☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

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2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/16389

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L9/18 H04L9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 047 069 A (HOGAN JOSH) 4 April 2000 (2000-04-04) abstract column 2, line 59 - line 64 column 4, line 29 - column 5, line 6 figures 5,6	1-12
X	WO 99/41877 A (NOKIA MOBILE PHONES LTD ;HAKASTE MARKUS (FI)) 19 August 1999 (1999-08-19) page 3, line 14 -page 4, line 2 page 5, line 15 -page 6, line 20 figures 4,5 --- -/--	1-12

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

18 June 2004

Date of mailing of the international search report

30/06/2004

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No.
PCT/JP 03/16389

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 6 088 449 A (ATALLA MARTIN M) 11 July 2000 (2000-07-11) abstract column 1, line 25 - line 28 column 1, line 31 - line 35 column 1, line 65 -column 2, line 3 column 2, line 19 - line 22 column 2, line 34 - line 37 column 2, line 56 -column 3, line 13 column 3, line 30 - line 63 column 6, line 34 -column 7, line 3 column 7, line 27 - line 59 column 8, line 30 -column 9, line 20 figures 2-8</p> <p style="text-align: center;">---</p>	1-12
A	<p>US 2001/012362 A1 (MARZAHN DAVID M) 9 August 2001 (2001-08-09) abstract paragraphs '0014!, '0015!, '0019! paragraphs '0024!, '0025!</p> <p style="text-align: center;">-----</p>	1-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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			US 6252961 B1	26-06-2001
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